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EXHIBIT A

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IN THE UNITED STATES DISTRICT COURT
IN AND FOR THE DISTRICT OF DELAWARE

GLAXO GROUP LIMITED,
Plaintiff,
v.
TEVA PHARMACEUTICALS USA, INC.
and TEVA PHARMACEUTICALS
INDUSTRIES LIMITED,
Defendants.

CIVIL ACTION

NO. 04-171 (KJW)

Wilmington, Delaware
Thursday, June 30, 2005 at 11:30 a.m.
TELEPHONE CONFERENCE

BEFORE: HONORABLE KENT A. JORDAN, U.S.D.C.J.

APPEARANCES:

CONNOLLY BOVE LODGE & HUTZ, LLP
BY: FRANCIS DIGIOVANNI, ESQ.

-and-

MORGAN LEWIS & BOCKIUS, LLP
BY: BRIAN P. MURPHY, ESQ.,
JASON LIEF, ESQ., and
THOMAS J. PUPPA, ESQ.
(New York, New York)

Counsel for Glaxo Group Limited

Brian P. Gaffigan
Official Court Reporter

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MR. DIGIOVANNI: Your Honor, Frank DiGiovanni
from Connolly Bove, local counsel for plaintiff Glaxo. Also
on the line is Brian Murphy who can introduce himself.

MR. MURPHY: Good morning, Your Honor. This is
Brian Murphy from Morgan Lewis & Bockius on behalf of the
plaintiff Glaxo. With me also is Jason Lief and Tom Pappa.

THE COURT: All right. Good morning.
For the defense?

MS. KELLER: Good morning, Your Honor. This is
Karen Keller from Young Conaway on behalf of Teva. I also
have with me on the phone Mark Schuman from Merchant & Gould
and John Berns is with him and Isabella Polsky (phonetic)
from Teva.

THE COURT: All right. Good morning.

MR. SCHUMAN: Good morning, Your Honor.

THE COURT: I have the letters from counsel
related to the dispute that brings us here this morning.
Actually, it looks like broadly speaking three categories of
dispute.

And I'm puzzled by the first one which is a
retread of something that we did months ago. On the one
hand, I have the plaintiff saying, "hey, we had an agreement
and they were supposed to memorialize it" and, on the other
hand, I have the defendants saying, "we did memorialize it.
They just don't like our answer."

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APPEARANCES (Continued):

YOUNG CONAWAY STARGATT & TAYLOR, LLP
BY: KAREN E. KELLER, ESQ.

-and-

MERCHANT & GOULD
BY: MARK D. SCHUMAN, ESQ., and
JOHN M. BERNs, ESQ.
(Minneapolis, Minnesota)

Counsel for Teva Pharmaceuticals USA,
Inc. and Teva Pharmaceuticals
Industries, LTD.

- oOo -

P R O C E E D I N G S

(Telephone conference began at 11:30 a.m.)

THE COURT: Hi, this is Judge Jordan. Who do I
have on the line?

THE TELEPHONE OPERATOR: I'm sorry?

THE COURT: I said this is Judge Jordan. Who do
I have the on the line, please?

THE TELEPHONE OPERATOR: Just a moment. I'm
going to bring you in the conference.

Excuse me. This is the operator. I'm joining
Judge Jordan to the conference call.

THE COURT: Good morning. I need to know who is
on the line. Please identify yourself and who you represent
for the record.

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Now, I've read what you guys sent to me so I
don't need to you repeat what you said. But this is the
question I have for the plaintiffs. I went back and I
read the transcript again and I said, at the request of
Mr. Murphy, "will you give something in writing which
memorializes the statement on the record that we're talking
about here, the one matter in dispute, that is, this
substitution of ethanol for propylene glycol, if I've got it
straight?" And the response, well, the specific thing Mr.
Murphy asked for, "we want that formalized in a stip or an
answer," meaning an answer referring back to contention
interrogatory number six. And they said "fine." So the
defense says "we did that." So you wanted something in
writing and you had agreed that contention interrogatory
number six being answered ought to do it.

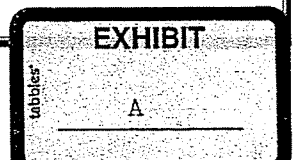
What is your issue, Mr. Murphy?

MR. MURPHY: Yes, Your Honor. The issue we
have is simply that it's not an evidentiary, it's not for
evidentiary admission in order to complete the agreement,
which was to avoid all discovery on all of the claim
elements except for the so-called ethanol limitation. And I
think there is an agreement in spirit. I think it's a
question of process.

THE COURT: Well, let's cut through the process
then.

United States District Court for the District of Delaware
Before the Honorable Kent A. Jordan

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SHEET 2

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1 Mr. Schuman.
 2 MR. SCHUMAN: Yes.
 3 THE COURT: In the letter I got from your
 4 corresponding counsel, it's reiterated that you are not
 5 contesting any other claim limitation in this case. That's
 6 the single point at issue. Have I misread you?
 7 MR. SCHUMAN: You have not, Your Honor. And I
 8 think maybe I can cut this to the chase, too. Our client is
 9 interested in doing this quickly and cheaply and I have a
 10 stipulation I'm prepared to read on the record if this will
 11 help anything. And I think it might actually do it.
 12 THE COURT: Go ahead.
 13 MR. SCHUMAN: Here it is. Teva admits that the
 14 ranitidine oral solution described in ANDA 76-937 contains
 15 all the elements of Claims 1 through 11 of U.S. Patent No.
 16 5,068,249 except the following:
 17 (1), "a stabilizing effective amount of ethanol"
 18 in Claims 1 through 10;
 19 (2), "2.5 percent to 10 percent weight/volume
 20 ethanol" in claim 2;
 21 (3), "7 percent to 8 percent weight/volume
 22 ethanol" in Claims 3, 11 and 12.
 23 THE COURT: All right. Does that do it for you,
 24 Mr. Murphy?
 25 MR. MURPHY: That's does it, Your Honor.

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1 left at issue once they say we don't have anything
 2 corresponding to that. Is the way they frame that too
 3 narrow? What is the issue left?
 4 MR. MURPHY: Yes, it is. It's extremely narrow
 5 and our position has been and remains from the beginning of
 6 this case that they're hiding behind an artificial
 7 construct.
 8 Briefly, Your Honor, Novopharm is a Canadian
 9 company that started the formulation work for this product
 10 and there is only one product at issue -- not two, one
 11 product, and it's always been one product. And Novopharm
 12 began the formulation work many years ago in Canada when
 13 they were not part of Teva. Novopharm first we know
 14 formulated ranitidine oral solution containing ethanol. We
 15 also know that Novopharm later formulated a series of
 16 different solutions with different concentrations of
 17 propylene glycol as a substitute for ethanol. And we
 18 believe, of course, that that was in light of our patent
 19 claim.
 20 Novopharm filed an ANDA or Abbreviated New Drug
 21 Application for the propylene glycol formulation also many
 22 years ago, I think in '98 or thereabouts, and they withdrew
 23 it after the Pharmadyne decision by Judge Davis.
 24 Several years later, Teva acquired the Novopharm
 25 company and Novopharm put together a package of information

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1 THE COURT: All right.
 2 MR. MURPHY: Thanks, Mark.
 3 MR. SCHUMAN: You're welcome. I think it wasn't
 4 a meeting of the minds on the language but anyway, that does
 5 it.
 6 THE COURT: All right. Good enough. Then we're
 7 done with that.
 8 Let's turn to the second point which appears to
 9 be in dispute which has to do with the request by Glaxo for
 10 Novopharm formulation documents. And in this instance, the
 11 response that I get back from the folks at Teva is that they
 12 don't have any documents related to the selection of
 13 propylene glycol for use in its formation.
 14 MR. SCHUMAN: We have some, Your Honor.
 15 THE COURT: Maybe I misread this. I thought I
 16 read on page three of the June 29, 2005 letter, "Glaxo
 17 demands documents that explain Novopharm's decision to
 18 select propylene glycol for use in its formulation. Teva
 19 has found no such documents."
 20 MR. SCHUMAN: I'm sorry, Your Honor. The word
 21 "decision" I didn't catch when you were reading it. That's
 22 the sticker there.
 23 THE COURT: Okay. Well, why don't, since you
 24 haven't had a chance to say anything in response to this
 25 June 29th letter, Mr. Murphy, why don't you tell me what's

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1 and transferred all of the technology to their new parent
 2 company, and Novopharm is a wholly owned subsidiary of Teva.
 3 Teva took that final propylene glycol formulation and filed
 4 a new ANDA which is the subject of this dispute. So it's
 5 exactly the same formulation, it's one product, it's always
 6 been one product and all of the Novopharm documents are
 7 within the control of Teva.
 8 To give you an example of why I think they are
 9 intentionally casting the issue very narrowly is because I
 10 know that they must have laboratory notebooks and
 11 development reports from the original ethanol formulation
 12 and all of the different propylene glycol formulations and
 13 we have specifically identified in the record where we have
 14 been able to find reference to each of the different, each
 15 of the different batch numbers at least of the propylene
 16 glycol formulation. And we have also tried to identify
 17 specific references to many notebooks wherever possible.
 18 And so, for example, the information package
 19 that was put together is called a reformulation information
 20 package that Novopharm wants to give to Teva don't have it.
 21 We'll repeatedly ask for it. They say they can't find it.
 22 I don't believe it. We've asked for a Novopharm development
 23 report on ranitidine oral solution and its propylene glycol
 24 form. They say they're looking for it, can't find it. We
 25 identified several places where it's referenced to different

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EXHIBIT B

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Hawley's Condensed Chemical Dictionary

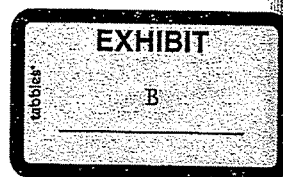
ELEVENTH EDITION

Revised by

N. Irving Sax
and
Richard J. Lewis, Sr.



VAN NOSTRAND REINHOLD
New York



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III. Lewis, Richard J., Sr. IV. Title.

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in water; bp 77C; vap press 73 mm (20C); fp -83.6C; bulk density 0.8945 g/ml (25C); flash p 24F (-4.4C); autoign temperature 800F (426C).

Derivation: By heating acetic acid and ethyl alcohol in presence of sulfuric acid and distilling.

Grade: Commercial 85-88%, 95-98%, 99%, NF (99%), FCC.

Hazard: Toxic by inhalation and skin absorption; irritant to eyes and skin. Flammable; dangerous fire and explosion risk, flammable limits in air 2.2-9%. TLV: 400 ppm in air.

Use: General solvent in coatings and plastics, organic synthesis, smokeless powders, pharmaceuticals, synthetic fruit essences.

ethyl acetate, anhydrous. ethyl acetate, grade 99%.

ethyl-o-acetate. $\text{CH}_3\text{C}(\text{OC}_2\text{H}_5)_3$.

Properties: Colorless liquid, bp 144-148C, refr index 1.395 (25C), insoluble in water, soluble in alcohol and ether, flash p 131F (55C). Combustible.

Hazard: Moderate fire risk.

Use: Intermediate.

ethyl acetic acid. See butyric acid.

ethyl acetoacetate. (diacetic ester; acetoacetic ester). $\text{CH}_3\text{COCH}_2\text{COOC}_2\text{H}_5$ (keto form), $\text{CH}_3\text{C}(\text{OH})\text{:CHCOOC}_2\text{H}_5$ (enol form).

This compound is a tautomer at room temperature consisting of about 93% keto form and 7% enol form.

Properties: Colorless liquid, fruity odor, soluble in water and common organic solvents, d 1.0250 (20/4C), fp (enol) -80C (keto) -39C, bp 180-181C, bulk d 8.5 lb/gal, vap press 0.8 mm (20C), flash p 185F (85C) (COC), coefficient of expansion 0.00101/C. Combustible.

Derivation: Action of metallic sodium on ethyl acetate with subsequent distillation.

Grade: Technical, 98%.

Hazard: Toxic by ingestion and inhalation; irritant to skin and eyes.

Use: Organic synthesis, antipyrine, lacquers, dopes, plastics, manufacture of dyes, pharmaceuticals antimalarials, vitamin B; flavoring.

ethyl acetone. See methyl propyl ketone.

ethylacetylene. (1-butyne). CAS: 107-00-6. $\text{C}_2\text{H}_5\text{C}\equiv\text{CH}$.

Properties: Available as liquefied gas, bp 8.3C, d 0.669 (0/0C), fp -130C, flash p less than 20F (-6.6C) (TOC), specific volume 7.2 cu/ft/lb (21.2C), insoluble in water.

Hazard: Flammable, dangerous fire risk.

Use: Specialty fuel, chemical intermediate.

ethyl-n-acetyl- α -cyanoglycine. See ethyl acetamidocynoacetate.

ethyl acrylate. CAS: 140-88-5.

$\text{CH}_2\text{:CHCOOC}_2\text{H}_5$.

Properties: Colorless liquid, bp 99.4C, fp -72.0C, d 0.9230 (20/20C), refr index 1.4037 (25C), bulk d 7.6 lb/gal (20C), soluble in alcohol and ether, readily polymerized, flash p 60F (15.5C) (open cup).

Derivation: (a) Ethylene cyanohydrin, ethyl alcohol, and dilute sulfuric acid; (b) Oxo reaction of acetylene, carbon monoxide, and ethyl alcohol in the presence of nickel or cobalt catalyst.

Grade: Technical (inhibited, usually with hydroquinone or its monomethyl ether), pure uninhibited.

Hazard: Toxic by ingestion, inhalation, skin absorption; irritant to skin and eyes. Flammable, dangerous fire and explosion hazard. TLV: 5 ppm in air.

Use: Monomer for acrylic resins.

See also acrylate and acrylic resin.

ethyl alcohol. (alcohol; grain alcohol; ethanol; EtOH). CAS: 64-17-5. $\text{C}_2\text{H}_5\text{OH}$.

Properties of pure 100% absolute alcohol (dehydrated): Colorless, limpid, volatile liquid. Bp 78.3C, fp -117.3C, ethereal vinous odor, pungent taste. Miscible with water, methanol, ether, chloroform, and acetone. Properties: (95%) Refr index 1.3651 (15C), surface tension 22.3 dynes/cm (20C), viscosity 0.0141 poise (20C), vap press 43 mm (20C), specific heat 0.618 cal/g (23C), flash p 55F (12.7C), d 0.816 (15.56C), bp 78C, fp -114C, autoign temperature 793F (422C).

Derivation: (a) From ethylene by direct catalytic hydration or with ethyl sulfate as intermediate; (b) fermentation of biomass, especially agricultural wastes; (c) enzymatic hydrolysis of cellulose (see also cellulase).

Grade: USP (95% by volume), absolute, pure, completely denatured, specially denatured, industrial, various proofs (one-half the proof number is the percentage of alcohol by volume).

Hazard: Is classified as a depressant drug. Though it is rapidly oxidized in the body and is therefore noncumulative, ingestion of even moderate amounts causes lowering of inhibitions, often succeeded by dizziness, headache, or nausea. Larger intake causes loss of motor nerve control, shallow respiration, and in extreme cases unconsciousness and even death. Degree of intoxication is determined by concentration of alcohol in the brain. Of primary importance is the fact that intake of even moderate amounts together with

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ETHYL α -ALLYL

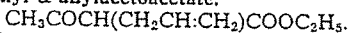
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barbiturates or similar drugs is extremely dangerous and may even be fatal. Flammable, dangerous fire risk; flammable limits in air 3.3–19%. TLV: 1000 ppm in air.

Use: Solvent for resins, fats, fatty acids, oils, hydrocarbons; extraction medium; manufacture of acetaldehyde, acetic acid, ethylene, butadiene, 2-ethyl hexanol, dyes, pharmaceuticals, elastomers, detergents, cleaning preparations, surface coatings, cosmetics, explosives; antifreeze, beverages, antisepsis, gasohol, yeast-growth medium, octane booster in gasoline.

See also alcohol, denatured; industrial alcohol, biomass.

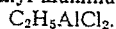
Note: Ethanol from fermentation of biomass and hydrolysis of cellulose is a significant alternate energy source, especially as an automotive fuel. Its use in gasoline will continue to increase. Further information can be obtained from the National Alcohol Fuels Information Center, 1617 Cole Blvd., Golden, Colorado, 80401.

ethyl α -allylacetate.

Properties: Water-white liquid, d 0.989 (20C), bulk density 8.24 lb/gal (20C). Combustible.

Use: Intermediate for pharmaceuticals, perfumes, fungicides, insecticides, fine chemicals.

ethyl aluminum dichloride. (EADC).



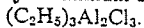
Properties: Clear, yellow, pyrophoric liquid. Bp (extrapolated) 194C, fp 32C, d 1.222, bulk d 10.28 lb/gal (25C).

Derivation: Reaction of aluminum chloride with ethyl aluminum sesquichloride.

Hazard: Ignites on contact with air, dangerous fire risk, reacts violently with water. Skin irritant.

Use: Catalyst for olefin polymerization, aromatic hydrogenation; intermediate.

ethyl aluminum sesquichloride. (EASC).



Properties: Clear, yellow, pyrophoric liquid. Bp 204C, fp –50C, d 1.08.

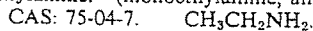
Derivation: Reaction of ethyl chloride and aluminum.

Grade: Commercial.

Hazard: Ignites on contact with air, dangerous fire risk, reacts violently with water.

Use: Catalyst for olefin polymerization, aromatic hydrogenation; intermediate.

ethylamine. (monoethylamine; aminoethane).



Properties: Colorless, volatile liquid (or gas). Ammonia odor, strong alkaline reaction, bp 16.6C, fp –81.2C, d 0.689 (liquid 15/15C), bulk d 5.7 lb/gal (20C), flash p approximately 0F (–17.7C)

(OC), autoign temperature 723F (383C). Miscible with water, alcohol, and ether.

Derivation: From ethyl chloride and alcoholic ammonia under heat and pressure.

Grade: Technical (anhydrous and 70% aqueous solution), pure 98.5% min.

Hazard: Strong irritant. Flammable, dangerous fire risk, flammable limits in air 3.5–14%. TLV: 10 ppm in air.

Use: Dye intermediate, solvent extraction, petroleum refining, stabilizer for rubber latex, detergents, organic synthesis.

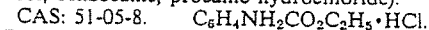
ethylamine hydrobromide. $\text{C}_2\text{H}_5\text{NH}_2 \cdot \text{HBr}$.

Properties: White, almost odorless granules; mp 158–161C; very soluble in water.

Use: Intermediate (where liquid ethylamine or liquid hydrobromic acid cannot be used).

ethyl-o-aminobenzoate. See ethyl anthranilate.

ethyl-p-aminobenzoate hydrochloride. (anesthetic; benzocaine; procaine hydrochloride).



Properties: White, crystalline, odorless, tasteless powder; stable in air; mp 88–92C; soluble in dilute acids; less soluble in chloroform, ether, and alcohol; very slightly soluble in water.

Derivation: Ethylation of p-nitrobenzoic acid followed by reduction.

Grade: Technical, pure, NF (as benzocaine).

Hazard: Toxic by ingestion.

Use: Medicine (local anesthetic), suntan preparations.

ethylaminoethanol. See ethylethanolamine.

Mixed ethylaminoethanols (sold in up to tank car lots) may also contain diethylaminoethanol.

2-ethylamino-4-isopropylamino-6-methylthio-s-triazine. $\text{C}_2\text{H}_5\text{HNC}_3\text{N}_3(\text{SCH}_3)\text{NHCH}(\text{CH}_3)_2$.

Properties: White, crystalline powder; mp 84–85C; slightly soluble in water; soluble in organic solvents.

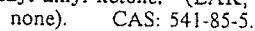
Hazard: Toxic by ingestion.

Use: Weed-killing agent in pineapple and sugar cane.

ethyl-1-(p-aminophenyl)-4-phenylisonipecotate.

See anileridine.

ethyl amyl ketone. (EAK; 5-methyl-3-heptanone).



Properties: Colorless liquid, pungent odor, insoluble in water, soluble in 4 volumes of 60% alcohol, bp 157C, bulk d 83 lb/gal, d 0.819–0.824, refr index 1.416, flash p 138F (58C). Combustible.

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EXHIBIT C

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New Collegiate Dictionary

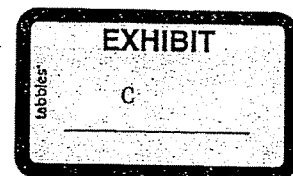
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estradiol • Ethiopic

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es-tra-di-ol \es-trā-'dī-ōl, -ōl\ *n* [ISV *estra-* (fr. *estrin*) + *di-* + *-ol*]: an estrogenic hormone that is a phenolic steroid alcohol $C_{18}H_{24}O_2$ usu. made synthetically and that is often used combined as an ester esp. in treating menopausal symptoms

es-tral \es-trāl\ *adj*: ESTROUS

estral cycle *n*: ESTROUS CYCLE

es-trange \is-'trānj\ *vi* **es-tranged**; **es-trang-ing** [MF *estranger*, fr. ML *extraneare*, fr. L *extraneus* strange — more at STRANGE]

1: to remove from customary environment or associations 2: to arouse esp. mutual enmity or indifference in where there had formerly been love, affection, or friendliness: ALIENATE — **es-trange-ment** \-'trānj-mənt\ *n* — **es-trang-er** *n*

syn ESTRANGE, ALIENATE, DISAFFECT, WEAN *shared meaning element* 1: to cause one to break a bond of affection or loyalty *ant* reconcile

es-tray \is-'trā\ *vi* [MF *estraier*] *archaic*: STRAY

estray *n*: STRAY 1

es-trin \es-trōn\ *n* [NL *estrus*]: an estrogenic hormone; *esp*: ESTRONE

es-tri-ol \es-trī-'ōl, -ōl\ *n* [*estrin* + *tri-* + *-ol*]: a crystalline estrogenic hormone that is a glycol $C_{18}H_{24}O_2$ usu. obtained from the urine of pregnant women

es-tro-gen \es-trō-jen\ *n* [NL *estrus* + ISV *-o-* + *-gen*]: a substance (as a sex hormone) tending to promote estrus and stimulate the development of secondary sex characteristics in the female

es-tro-gen-ic \es-trō-'jen-ik\ *adj* 1: promoting estrus 2: of, relating to, or caused by an estrogen — **es-tro-gen-i-cal-ly** \-'i-k(-ə)-lē\ *adv*

es-trone \es-trōn\ *n* [ISV, fr. *estrin*]: an estrogenic hormone that is a ketone $C_{18}H_{22}O_2$ is usu. obtained from the urine of pregnant females, and is used similarly to estradiol

es-trous \es-trōs\ *adj* 1: of, relating to, or characteristic of estrus 2: being in heat

estrous cycle *n*: the correlated phenomena of the endocrine and generative systems of a female mammal from the beginning of one period of estrus to the beginning of the next — called also *estral cycle*

es-tru-al \es-trū-'wəl\ *adj*: ESTROUS

es-trus \es-trōs\ or **es-trum** \-trām\ *n* [NL, fr. L *oestrus* gadfly, frenzy, fr. Gk *oistros* — more at IRE] 1 a: a regularly recurrent state of sexual excitability during which the female of most mammals will accept the male and is capable of conceiving: HEAT b: a single occurrence of this state 2: ESTROUS CYCLE

es-tu-ar-i-al \es(h)-chā-'wer-ē-əl\ *adj*: ESTUARINE

es-tu-a-rine \es(h)-chā-'wer-ē-ən, -rēn\ *adj*: of, relating to, or formed in an estuary <~ currents> <~ animals> <~ environment>

es-tu-ary \es(h)-chā-'wer-ē\ *n*, *pl* *-aries* [L *aestuarium*, fr. *aestus* boiling, tide; akin to L *aestas* summer — more at AESTIVAL]: a water passage where the tide meets a river current; *esp*: an arm of the sea at the lower end of a river

ESU *abbr* electrostatic unit

esu-ri-ence \i-'sūr-ē-ən(t)s, -zūr-\ *n*: the quality or state of being esurient

esu-ri-en-cy \-ən-sē\ *n*: ESURIENCE

esu-ri-ent \-ənt\ *adj* [L *esuriens*, *esuriens*, prp. of *esurire* to be hungry]: HUNGRY, GREEDY — **esu-ri-ent-ly** *adv*

ESV *abbr* earth satellite vehicle

et \et\ *dialect* past of EAT

Et *symbol* ethyl

ET *abbr* eastern time

-et \et, et, et, it\ *n* *suffix* [ME, fr. OF *-et*, masc., & *-ete*, fem., fr. LL *-itus* & *-itia*] 1: small one <baronet> <cellaret> 2: group <octet>

ēta \tā-'ē, -ē\ *n* [LL, fr. Gk *ēta*, of Sem origin; akin to Heb *hēth* heth]: the 7th letter of the Greek alphabet — *see* ALPHABET table

ETA *abbr* estimated time of arrival

ēta-gère or **ēta-gere** \ā-'tā-'zhē(-ə)r, ā-'tā-'\ *n* [F *étagère*]: an elaborate whatnot often with a large mirror at the back and sometimes with an enclosed cabinet as a base

et al \et-'al, -'ōl\ *abbr* [L *et alii* (masc.), *et aliae* (fem.), or *et alia* (neut.)] and others

ēta-mine \tā-'ā-mēn\ *n* [F *étamine*]: a light cotton or worsted fabric with an open mesh

ēta-tism \ā-'tāt-'iz-əm\ *n* [F *étatisme*, fr. *état* state, fr. OF *estat*]: STATE SOCIALISM — **ēta-tist** \-'tāt-'ōst\ *adj*

ēto \ān-'sō-'fōrth, -'fōrth; et-'set-'ā-rə, -'se-'trā\ *abbr* et cetera

et-cet-ēra *n* 1: a number of unspecified additional persons or things 2 *pl*: unspecified additional items: ODDS AND ENDS

et-cet-ēra \et-'set-'ā-rə, -'se-'trā\ [L]: and others esp. of the same kind: and so forth

ēch \ech\ *vb* [D *etsen*, fr. G *ätzen*, lit., to feed, fr. OHG *azzen*; akin to OHG *ezzan* to eat — more at EAT] *vi* 1 a: to produce esp. on metal or glass by the corrosive action of an acid b: to subject to such etching 2: to delineate or impress clearly <scenes that are indelibly ~ed in our minds> ~ *vi*: to practice etching — **etch-er** *n*

etch *n* 1: the action or effect of an etching acid on a surface 2: a chemical agent used in etching

etch-ing *n* 1 a: the act or process of etching b: the art of producing pictures or designs by printing from an etched metal plate 2 a: an etched design b: an impression from an etched plate

ETD *abbr* estimated time of departure

ēter-nal \i-'tōrn-'əl\ *adj* [ME, fr. MF, fr. LL *aeternus* eternal; akin to L *aevum* age, eternity — *mo*

a: having infinite duration: EVERLASTING b: of or relating to eternity c: characterized by abiding fellowship with God <good teacher, what must I do to inherit ~ life? — Mk 10:17 (RSV)> 2 a: continued without intermission: PERPETUAL b: seemingly endless 3 *archaic*: INFERNAL 4: valid or existing at all times: TIMELESS <~ verities> — **ēter-nal-ize** \-'l-īz\ *vi* — **ēter-nal-ly** \-'l-ē\ *adv* — **ēter-nal-ness** *n*

ēter-nal *n* 1 *cap*: GOD 1 — used with the 2: something eternal **ēter-ne** \i-'tōrn\ *adj* [ME, fr. MF, fr. L *aeternus*] *archaic*: ETERNAL **ēter-ni-ty** \i-'tōrn-ē-tē\ *n*, *pl* *-ties* [ME *eternité*, fr. MF *eternité*, fr. L *aeternitas*, *aeternitas*, fr. *aeternus*] 1: the quality or state of being eternal 2: infinite time 3 *pl*: AGES 4: the state after death: IMMORTALITY 5: a seemingly endless or immeasurable time <he posed motionless for a seeming ~ as the crowd roared with laughter and encouragement — J. W. Cross>

ēter-nize \i-'tōrn-īz\ *vi* *-nized*; *-nizing* 1 a: to make eternal b: to prolong indefinitely 2: IMMORTALIZE — **ēter-ni-za-tion** \-'tōrn-'zā-shən\ *n*

ēte-sian \i-'tē-zhōn\ *adj*, *often cap* [L *etesius*, fr. Gk *etēsios*, fr. *etos* year — more at WETHER]: recurring annually — used of summer winds that blow over the Mediterranean — **ētesian** *n*, *often cap*

eth \eth\ *var* of EDH

eth- or **etho-** *comb form* [ISV]: ethyl <ethaldehyde> <ethochloride>

ēth \eth, ith, or -th\ *th* *suffix* [ME, fr. OE *-eth*, *-ath*, *-th*; akin to OHG *-ih*, *-ōh*, *-ēh*, 3d sing. ending, L *-it*, *-it*] — used to form the *archaic* third person singular present of verbs <goeth> <doth>

ēth — *see* -TH

ēth-a-cryn-ic acid \eth-'ā-kryn-ik-\ *n* [perh. fr. *eth-* + *acetic* + *butyryl* + *phenol*]: a diuretic $C_{11}H_{13}Cl_2O_4$ used esp. in the treatment of edema

eth-am-bu-tol \eth-'am-byū-'tōl, -tōl\ *n* [ethylenic + *amine* + *butanol*]: a compound $C_{10}H_{14}N_2O_2$ used esp. in the treatment of tuberculosis

eth-ane \eth-'ān\ *n* [ISV, fr. *ethyl*]: a colorless odorless gaseous hydrocarbon C_2H_6 found in natural gas and used esp. as a fuel

eth-a-nol \eth-'ā-nōl, -nōl\ *n*: ALCOHOL 1

eth-a-nol-amine \eth-'ā-nāl-'ā-mēn, -'nōl-\ *n*: a colorless liquid amino alcohol C_2H_7NO used esp. as a solvent and in scrubbing gases

eth-ene \eth-'ēn\ *n*: ETHYLENE

ether \ē-'thēr\ *n* [ME, fr. L *aether*, fr. Gk *aithēr*, fr. *aithein* to ignite, blaze] 1 a: the rarefied element formerly believed to fill the upper regions of space b: the upper regions of space: HEAVENS 2 a: a medium that in the undulatory theory of light permeates all space and transmits transverse waves b: the medium that transmits radio waves 3 a: a light volatile flammable liquid $C_4H_{10}O$ used chiefly as a solvent and anesthetic b: any of various organic compounds characterized by an oxygen atom attached to two carbon atoms — **ether-ish** \-'thē-rish\ *adj* — **ether-like** \-'thēr-'līk\ *adj*

eth-er-al \i-'thīr-'ē-əl\ *adj* 1 a: of or relating to the regions beyond the earth b: CELESTIAL HEAVENLY c: UNWORLDLY. SPIRITUAL 2 a: lacking material substance: IMMATERIAL. INTANGIBLE b: marked by unusual delicacy and refinement <this smallest, most ~, and daintiest of birds — William Beebe> 3: relating to, containing, or resembling a chemical ether — **eth-er-al-ity** \-'thīr-'ē-āl-ē-tē\ *n* — **eth-er-al-iza-tion** \-'ē-āl-'īzā-shən\ *n* — **eth-er-al-ize** \-'thīr-'ē-āl-'īz\ *vi* — **eth-er-al-ly** \-'ē-āl-'ē\ *adv* — **eth-er-al-ness** *n*

ether extract *n*: the part of a complex organic material that is soluble in ether and consists chiefly of fats and fatty acids

eth-er-ic \i-'thēr-ik, -'thīr-\ *adj*: ETHEREAL

ether-ize \ē-'thēr-'īz\ *vi* *-ized*; *-izing* 1: to treat or anesthetize with ether 2: to make numb as if by anesthetizing — **ether-iza-tion** \ē-'thēr-'īzā-shən\ *n* — **ether-iz-er** *n*

eth-ic \eth-'ik\ *n* [ME *ethik*, fr. MF *ethique*, fr. L *ethica*, fr. Gk *ēthikā*, fr. *ēthikos*] 1 *pl* *but sing* or *pl* in *constr*: the discipline dealing with what is good and bad and with moral duty and obligation 2 a: a set of moral principles or values b: a theory or system of moral values <the present-day materialistic ~> *c pl* *but sing* or *pl* in *constr*: the principles of conduct governing an individual or a group <professional ~s>

eth-i-cal \eth-'i-kəl\ *also* **eth-ic** \-'ik\ *adj* [ME *etik*, fr. L *ethicus*, fr. Gk *ēthikos*, fr. *ēthos* character] 1: of or relating to ethics 2: conforming to accepted professional standards of conduct 3 *of a drug*: restricted to sale only on a doctor's prescription *syn* *see* MORAL *ant* unethical — **eth-i-cal-ity** \eth-'i-kāl-ē-tē\ *n* — **eth-i-cal-ly** \eth-'i-k(-ə)-lē\ *adv* — **eth-i-cal-ness** \-'kāl-nəs\ *n*

ethical *n*: an ethical drug

eth-i-cian \ē-'thīsh-ən\ *n*: ETHICIST

eth-i-cist \eth-'ē-sōst\ *n*: a specialist in ethics

eth-ion \eth-'ē-ān\ *n* [blend of *eth-* and *thion-*]: an organophosphate $C_6H_{12}O_4P_2S_4$ used as a pesticide

eth-ion-amide \eth-'ē-ān-'ā-mīd\ *n* [*eth-* + *thion-* + *amide*]: a compound $C_8H_{10}N_2S$ used against mycobacteria (as in tuberculosis and leprosy)

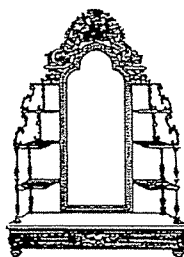
eth-i-o-nine \ē-'thī-'ō-nēn\ *n* [*eth-* + *thion-* + *-ine*]: an amino acid $C_6H_{13}NO_2S$ that is the ethyl homologue of methionine and is biologically antagonistic to methionine

Ethi-op \ē-'thē-āp\ or **Ethi-ope** \-'ōp\ *n* [ME *Ethiops*, fr. L *Aethiops*, fr. Gk *Aithiops*] *archaic*: ETHIOPIAN

1Ethi-o-pl-an \ē-'thē-'ō-pē-ən\ *n* 1: a member of any of the mythical or actual peoples usu. described by the ancient Greeks as dark-skinned and living far to the south 2: NEGRO 3: a native or inhabitant of Ethiopia

2Ethiopian *adj* 1: of, relating to, or characteristic of the inhabitants or the country of Ethiopia 2: of, relating to, or being the biogeographic region that includes Africa south of the Sahara, southern Arabia, and sometimes Madagascar and the adjacent islands

ip-ik, **ē-ō-pik** \adj 1: ETHIOPIAN 2 a: of, relating to, or being Ethiopic b: of, relating to, or constituting a Semitic language spoken in Ethiopia



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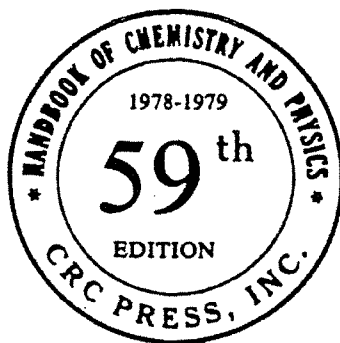
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PHYSICAL CONSTANTS OF ORGANIC COMPOUNDS (Continued)

No.	Name	Synonyms and Formula	Mol. wt.	Color, crystalline form, specific rotation and λ_{max} (log ϵ)	m.p. °C	b.p. °C	Density	n_D	Solubility						Ref.
									w	al	eth	ace	bz	other solvents	
1,1,2,2-Ethanetetracarboxylic acid															
Ω c326	—, tetraethyl ester*	Ethyl dimalonate. ($C_2H_5O_2C$) ₂ CHCH(CO ₂ C ₂ H ₅) ₂	318.33	tetr pr (al-peth)	77	305d	1.064 ⁸⁰	1.4105 ⁸⁰	...	s	...	...	...	...	B2 ² , 699
c327	—, tetramethyl ester*	Methyl dimalonate. (CH ₃ O ₂ C) ₂ CHCH(CO ₂ CH ₃) ₂	262.22	cr (eth, al, bz)	138	...	...	...	v ⁸	δ	...	s ⁸	lig i	...	B2 ² , 699
Ω c328	Ethanethiol*	Ethyl hydrosulfide. Ethyl mercaptan. Ethyl thioalcohol. C ₂ H ₅ SH	62.13	λ^{21} 195 (3.15), 225 sh (2.2)	-144.4	35 ⁸⁰	0.8391 ²⁰	1.43105 ¹⁰	δ	s	s	s	...	dil alk s	B1 ³ , 341
c329	—, sodium salt	Sodium thioethylate. C ₂ H ₅ SNa	84.12	wh cr λ^{21} 195 (3.15), 225 sh (2.2)	d	...	...	...	v	s	...	...	i	...	B1, 341
Ω c330	—, 2-amino*	Cystamine. H ₂ NCH ₂ CH ₂ SH	77.15	cr (sub)	99-100	d ¹⁰⁰ sub (vac)	...	...	v	s	...	...	dil HCl v	...	B4 ¹ , 431
c331	—, 2-chloro*	ClCH ₂ CH ₂ SH	96.58	...	...	113 ¹⁴⁰	1.1826 ²⁰	1.4929 ²⁰	s	v	v	...	...	diox v	B1 ³ , 1381
Ω c332	—, 1-phenyl-(/)*	CH ₃ CH(C ₆ H ₅)SH	138.23	[α] _D ²⁰ -89 (al, c=6)	...	199-200 83 ¹⁰	1.022 ²⁰	1.5593 ²⁰	...	s	s	...	...	...	B6 ¹ , 445
c333	1,1,1-Ethanetricarboxylic acid*	CH ₃ C(CO ₂ H) ₃	162.10	pr	159d	...	...	...	s	s	s	...	...	...	B2 ¹ , 2026
c334	1,1,2-Ethanetricarboxylic acid*	Carboxysuccinic acid. HO ₂ CCH ₂ CH(CO ₂ H) ₂	162.10	pr (w)	178d	...	...	...	v	v	v	...	δ	...	B2 ¹ , 681
c335	—, 1,2-dihydroxy*	Desotalic acid. HO ₂ CCH(OH)COH(CO ₂ H) ₂	194.10	hyg (+1w)	45d	...	...	...	v	δ	...	...	...	...	B3, 586
Ω c336	Ethanolic acid*	see Acetic acid	...	...	...	...	...	...	...	...	...	...	...	...	...
Ethanol*	Alcohol. Ethyl alcohol. Methyl carbinol. C ₂ H ₅ OH	46.07	λ^{100} 181 (2.51) (-112.3)	-117.3 4 ¹⁴	78.5 78.8 ¹⁴⁰	0.7893 ²⁰	1.3611 ²⁰	∞	∞	∞	∞	s	chl, 2a ∞	...	B1 ³ , 1223
c337	—(c-d)	o-Deuteroethanol. Deuterioxyethane. C ₂ H ₅ OD	47.08	...	...	78.8 ¹⁴⁰	0.801 ²⁰	1.3610 ²⁰	∞	∞	∞	∞	s	2a ∞ CCl ₄ s MeOH, CCl ₄ s	B1 ³ , 1287
Ω c338	—, 2-allyloxy*	Allyl cellosolve. Glycol monoallyl ether. CH ₂ =CHCH ₂ OCH ₂ CH ₂ OH	102.13	...	...	159 ⁷²⁰ 64 ¹²	0.9580 ²⁰	1.4358 ¹⁰	∞	v	...	...	s	...	B1, 468
Ω c339	—, 1-amino*	Acetaldehyde-ammonia. CH ₃ CH(OH)NH ₂	61.09	rh (eth-al)	97	110 δ d	...	...	s	...	δ	...	...	...	CS ₂ , 10081
Ω c340	—, 2-amino*	Colamine. Ethanolamine. H ₂ NCH ₂ CH ₂ OH	61.09	...	10.3	170 ⁷²⁰ 58 ²	1.0180 ²⁰	1.4541 ²⁰	∞	∞	δ	...	δ	glycerol ∞ chls lig δ	B4 ¹ , 717
—	—, 2-amino-1(3,4-dihydroxyphenyl)-(/)*	see Noradrenaline (/)	...	...	...	...	...	...	...	...	...	...	...	...	...
Ω c341	—, 2-amino-1-phenyl*	H ₂ NCH ₂ CH(OH)C ₆ H ₅	137.18	nd (al-eth-peth)	56-7 (40)	160 ¹²	...	...	v	s	...	...	...	...	B13 ³ , 361
c342	—, 1-amino-2,2,2-trichloro*	Chloral-ammonia. Cl ₃ CCH(OH)NH ₂	164.42	nd (al)	72-4	100d	...	...	δ	s	y	...	v	...	B1 ³ , 681
Ω c343	—, 2(2-aminoethylamino)*	H ₂ NCH ₂ CH ₂ NHCH ₂ CH ₂ OH	104.15	hyg liq	...	238-40 ¹²⁰ (cor) 91.2 ¹	0.9556 ²⁰	1.4860 ²⁰	v	v	δ	...	...	...	B4, 286
c344	—, 2(2-amino-phenyl)*	...	137.18	ye in air	...	152-3 ⁸	...	1.5849 ¹²	s	...	...	...	...	...	B13 ³ , 362
c345	—, 2(4-amino-phenyl)*	...	137.18	nd (al)	108	...	...	...	δ s ⁸	...	...	...	...	...	B13 ³ , 362
c346	—, 2-benzoyloxy*	Glycol monobenzyl ether. C ₆ H ₅ CH ₂ OCH ₂ CH ₂ OH	152.20	...	< -75	256 ¹⁰⁰ 138 ¹²	1.0640 ²⁰	1.5233 ²⁰	s	s	s	...	...	...	B6 ¹ , 413
c346 ¹	—, 1,1-bis(4-chlorophenyl)*	4,4'-Dichloro-s-methylbenzhydrol. Dimite.	267.16	cr (al-w) λ^{200} 240 (3.8), 325 (4.2), 370 sh (3.5), 450 (4.9), 500 sh (3.01)	69-70	...	...	...	i	i	s	...	s	...	Am 73, 1856
Ω c347	—, 2-bromo*	Ethylene bromohydrin. BrCH ₂ CH ₂ OH	124.97	...	...	149-50 ¹²⁰ 51 ⁴	1.7629 ²⁰	1.4915 ²⁰	∞	∞	∞	oos v lig δ	B1 ³ , 337
Ω c348	—, 2-butoxy*	Glycol monobutyl ether. C ₄ H ₉ OCH ₂ CH ₂ OH	118.18	...	...	171 ¹⁴⁰ 50 ⁴	0.9015 ²⁰	1.4198 ²⁰	∞	∞	∞	B1 ³ , 519
Ω c349	—, 2-butylamino*	C ₄ H ₉ NHCH ₂ CH ₂ OH	117.19	...	...	199-200 ¹⁰⁰ 91-2 ¹²	0.8907 ²⁰	1.4437 ²⁰	v	v	v	...	...	...	B4, 283
Ω c350	—, 2-chloro*	Ethylene chlorohydrin. ClCH ₂ CH ₂ OH	80.52	...	-67.5	128 ¹⁴⁰ 44 ¹⁰	1.2002 ²⁰	1.44189 ²⁰	∞	∞	δ	...	...	os ∞	B1 ³ , 333
c351	—, 2-chloro-1-phenyl*	Styrene chlorohydrin. C ₆ H ₅ CH(OH)CH ₂ Cl	156.61	...	...	128 ¹⁷ 91.5 ^{1,3}	1.1926 ²⁰	1.5523 ²⁰	...	s	v	...	...	...	B6 ² , 446
Ω c352	—, 2(2-chloroethoxy)*	β -Chloroethyl cellosolve. ClCH ₂ CH ₂ OCH ₂ CH ₂ OH	124.57	...	...	180-85 91-2 ¹²	...	1.4505 ¹⁰	v	∞	∞	B1 ³ , 519
Ω c353	—, 1-cyclohexyl*	Methylcyclohexylcarbinol.	128.22	λ^{21} 255 (3.8)	...	189 81-2 ¹² 207-9 ⁷²⁰	0.9250 ²⁰	1.4677 ²⁰	...	v	v	...	...	...	B6 ² , 27
Ω c354	—, 2-cyclohexyl*	...	128.22	...	...	97-9 ¹² 183-4 ¹²⁰	0.9229 ²⁰	1.4641 ²⁰	...	s	s	...	s	...	B6 ² , 27
Ω c355	—, 2-cyclopentyl*	...	114.19	...	...	96-7 ¹² 146 ¹⁰	0.9180 ²⁰	1.4577 ²⁰	i	...	s	...	...	...	B6 ² , 25
Ω c356	—, 2,2-dichloro*	Cl ₂ CHCH ₂ OH	114.96	...	...	37-8 ⁴	1.4040 ²⁰	1.4626 ²⁰	δ	s	s	...	...	...	B1, 338
—	—, 2,1-diethoxy*	see Acetaldehyde, 2-hydroxy-, diethyl acetal	...	...	...	...	...	...	...	...	...	...	...	...	...

For explanations, symbols and abbreviations see beginning of table. For structural formulas see end of table.

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PHYSICAL CONSTANTS OF ORGANIC COMPOUNDS (Continued)

No.	Name	Synonyms and Formula	Mol. wt.	Color, crystalline form, specific rotation and d_{20}^{25} (log c)	m.p. °C	b.p. °C	Density	n_D	Solubility						Ref.
									w	al	eth	ace	br	other solvents	
1-Propanearsonic acid															
Ω p1231	1-Propanearsonic acid*	$\text{CH}_3\text{CH}_2\text{CH}_2\text{AsO}_2\text{H}_2$	168.03	nd (al), pl (w)	134.6–5.2	.....	.....	.....	v	v	i	.....	.....	.....	B4 ² , 997
p1232	1-Propaneboronic acid*	n-Propylboric acid. $\text{CH}_3\text{CH}_2\text{CH}_2\text{B}(\text{OH})_2$	87.92	wh nd	107	d	.....	.....	v	s	s	.....	.....	.....	B4 ² , 1023
p1233	—, 2-methyl-*	Isobutylboric acid. $(\text{CH}_3)_2\text{CHCH}_2\text{B}(\text{OH})_2$ see Malonic acid	101.94	lo pl (w), or ($\text{ClCH}_2\text{CH}_2\text{Cl}$)	112	.....	.....	.....	δ	s	s	.....	.....	.....	B4 ² , 1965
Ω p1234	Propanedioic acid* 1,2-Propanediol*	Propylene glycol. $\text{CH}_3\text{CH}(\text{OH})\text{CH}_2\text{OH}$	76.11	.....	.....	189–96–8 ²¹	1.0361 ²⁰	1.4324 ²⁰	∞	∞	s	.....	s	.....	B1 ² , 2142
Ω p1235	—, carbonate	4-Methyl-1,3-dioxolan-2-one. $\text{CH}_3\text{CO}_2\text{CH}(\text{CH}_3)\text{CH}_2\text{O}_2\text{CCH}_3$	102.09	.....	–48.8	240	1.2041 ²⁰	1.4189 ²⁰	v	v	v	v	8	.....	C49, 12303
p1236	—, diacetate .....	.....	160.17	.....	.....	190–1 ^{7a2}	1.0592 ²⁰	1.4173 ²⁰	v	s	s	.....	.....	.....	B2 ² , 312
p1243	—, sulfite .....	.....	122.14	.....	< –60	175	1.2960 ²⁰	1.4370 ²⁰	v	v	v	v	v	AcOEt v	CS1, 1036
Ω p1244	1,3-Propanediol*	Trimethylene glycol. $\text{HOCH}_2\text{CH}_2\text{CH}_2\text{OH}$	76.11	.....	.....	213.5 ^{7a2} 110 ¹²	1.0597 ²⁰	1.4398 ²⁰	∞	∞	v	.....	δ s^*	.....	B1 ² , 540
p1245	—, diacetate	$\text{CH}_3\text{CO}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{O}_2\text{CCH}_3$	160.17	.....	.....	209–10 ^{7a2} 84.5 ¹⁰	1.0701 ²⁰	1.4192	v	s	.....	.....	.....	.....	B2 ² , 156
Ω p1250	—, 2-amino-2-ethyl-*	$\text{CH}_3\text{CH}_2\text{C}(\text{CH}_3)(\text{OH})\text{NH}_2$..	119.17	yc	37.5–8.5	143–5 ¹⁰	1.0992 ²⁰	1.490 ²⁰	∞	C34, 1305
Ω p1251	—, 2-amino-2(hydroxymethyl)-*	$\text{H}_2\text{NC}(\text{CH}_2\text{OH})_2$	121.14	nd of fl (MeOH)	170.5–1.5	219–20 ¹⁸ (230–4 ¹²)	.....	.....	v	.....	.....	.....	.....	MeOH s ²	C49, 1357
Ω p1252	—, 2-amino-2-methyl-*	$\text{CH}_3\text{C}(\text{CH}_3)(\text{OH})\text{NH}_2$	105.14	.....	109–11	151.2 ¹⁸	.....	.....	v	s	.....	.....	.....	.....	C34, 1305
Ω p1253	—, 2-butyl-2-ethyl-*	$\text{CH}_3(\text{CH}_2)_3\text{C}(\text{C}_2\text{H}_5)(\text{CH}_2\text{OH})_2$	160.26	wh	43.8	262	0.9293 ²⁰	1.4587 ²⁰	δ	s	.....	.....	.....	.....	Am 70, 3121
Ω p1254	1,2-Propanediol, 3-chloro-*	α -Chlorohydrin. $\text{ClCH}_2\text{CH}(\text{OH})\text{CH}_2\text{OH}$	110.54	yesh liq	.....	213d 116 ¹²	1.3261 ²⁰	1.4809 ²⁰	s	s	s	.....	.....	.....	B1 ² , 2150
p1255	—, diacetate	$\text{ClCH}_2\text{CH}(\text{O}_2\text{CCH}_3)\text{CH}_2\text{O}_2\text{CCH}_3$	194.62	.....	.....	245 116 ¹²	1.1992 ²⁰	1.4407 ²⁰	.....	s	s	.....	.....	.....	B2 ² , 313
p1256	1,3-Propanediol, 2-chloro-*	$\text{HOCH}_2\text{CHClCH}_2\text{OH}$	110.54	.....	.....	146 ¹⁸	1.3219 ²⁰	1.4831 ²⁰	v	v	.....	v	.....	.....	B1 ² , 542
p1257	1,2-Propanediol, 3-chloro-2-methyl-*	$\text{ClCH}_2\text{C}(\text{OH})(\text{CH}_3)\text{CH}_2\text{OH}$	124.57	.....	.....	114–7 ²⁰ 80 ¹⁸	1.2362 ²⁰	1.4748 ²⁰	∞	∞	∞	B1 ² , 2188
—	—, 3,3-diethoxy-*	see Glyceraldehyde, diethyl acetal	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ω p1258	1,3-Propanediol, 2,2-dichloro-*	$\text{HOCH}_2\text{C}(\text{Cl})_2\text{CH}_2\text{OH}$..	132.21	wh	61.3–6	240–1 131 ¹³	1.0523 ²⁰	.....	v	v	v	.....	.....	os s ligi chls	Am 70, 946
p1259	1,2-Propanediol, 3(diethylamino)-*	$(\text{C}_2\text{H}_5)_2\text{NCH}_2\text{CH}(\text{OH})\text{CH}_2\text{OH}$	147.22	sy	.....	233–5	.....	.....	s	s	s	.....	.....	.....	B4, 302
Ω p1260	1,3-Propanediol, 2,2-dimethyl-*	$\text{HOCH}_2\text{C}(\text{CH}_3)_2\text{CH}_2\text{OH}$..	104.15	nd (bz)	130	206 ^{7a2} 120–30 ¹⁵	.....	.....	s	v	v	.....	s^*	.....	B1 ² , 2199
p1261	1,2-Propanediol, 3(dimethylamino)-*	$(\text{CH}_3)_2\text{NCH}_2\text{CH}(\text{OH})\text{CH}_2\text{OH}$	119.17	.....	.....	220 ^{7a2}	.....	.....	s	s	s	.....	.....	chls	B4, 302
p1262	1,3-Propanediol, 2,2-dinitro-*	$\text{HOCH}_2\text{C}(\text{NO}_2)_2\text{CH}_2\text{OH}$..	166.09	wh pl (bz)	142	.....	.....	.....	s^*	s^*	.....	.....	s^*	diox, PhNO ₂ ; s^* CCl ₄ i	C45, 9473
Ω p1263	—, 2-ethyl-2-hydroxymethyl-*	TMP. Trimethylolpropane. $\text{CH}_2\text{CH}_2\text{C}(\text{CH}_2\text{OH})_2$	134.18	wh pw or pl	58	160 ¹	∞	∞	i	.....	CS4, 2177
Ω p1264	—, 2-ethyl-2-nitro-*	$\text{CH}_3\text{CH}_2\text{C}(\text{NO}_2)(\text{CH}_2\text{OH})_2$	149.15	nd (w) s^* 280 sh (1.61)	57–8	d	.....	.....	v	v	v	.....	.....	.....	B1, 483
—	1,2-Propanediol, 3-hexadecyloxy-*	see Glycerol, 1-hexadecyl ether	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ω p1265	1,3-Propanediol, 2(hydroxymethyl)-2-methyl-*	Pentaglycerol. Trimethylol-ethane. $\text{CH}_3\text{C}(\text{CH}_2\text{OH})_3$	120.15	wh pw or nd (al)	204	135–7 ¹⁵	∞	∞	i	.....	i	ea v ²	B1 ² , 2348
Ω p1266	—, 2(hydroxymethyl)-2-nitro-*	$\text{O}_2\text{NC}(\text{CH}_2\text{OH})_2$	151.12	nd or pr	165 (144)	d	.....	.....	v	v	s	.....	.....	.....	B1 ² , 596
p1267	1,2-Propanediol, 3-mercapto-*	1-Thioglycerol. $\text{HSCH}_2\text{CH}(\text{OH})\text{CH}_2\text{OH}$	108.17	visc	.....	100–1 ¹	1.2455 ²⁰	1.5268 ²⁰	δ	∞	δ	v	δ	.....	B1 ² , 2339
p1268	—, 2-methyl-*	Isobutylene glycol. $(\text{CH}_3)_2\text{C}(\text{OH})\text{CH}_2\text{OH}$	90.12	.....	.....	176 ^{7a2} 79–80 ¹³	1.0024 ²⁰	1.4350 ²⁰	s	s	v	.....	.....	.....	B1 ² , 2187
p1269	1,3-Propanediol, 2-methyl-2-nitro-*	$\text{CH}_3\text{C}(\text{NO}_2)(\text{CH}_2\text{OH})_2$	135.12	mcl	149–50	d	.....	.....	v	v	.....	.....	.....	.....	B1 ² , 2190
p1270	—, 2-methyl-2-propyl-*	2,2-bis(hydroxymethyl)-pentane. $(\text{HOCH}_2)_2\text{C}(\text{CH}_3)(\text{CH}_2)_3\text{CH}_3$ see Glycerol, 1-octadecyl ether	132.21	cr (hx)	62–3	234	.....	.....	s	.....	.....	.....	.....	os s hx s^*	Am 72, 3716
p1271	1,2-Propanediol, 3-octadecyloxy-*	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
—	1,3-Propanediol, 2,2-dibromo-1,3-diphenyl-*	$\text{C}_6\text{H}_5\text{COCBr}_2\text{COC}_6\text{H}_5$	382.06	pr (eth)	95	.....	.....	.....	.....	δ	s^*	.....	.....	os δ	B7, 772

For explanations, symbols and abbreviations see beginning of table. For structural formulas see end of table.

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EXHIBIT E

REDACTED VERSION – PUBLICLY FILED

**CONTAINS CONFIDENTIAL INFORMATION
UNDER PROTECTIVE ORDER**

**IN THE UNITED STATES DISTRICT COURT
DISTRICT OF DELAWARE**

GLAXO GROUP LIMITED,

Plaintiff,

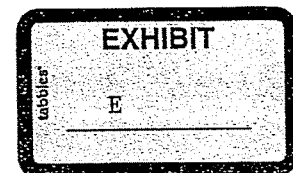
v.

TEVA PHARMACEUTICALS
USA, INC. AND
TEVA PHARMACEUTICAL
INDUSTRIES LIMITED,

Defendants.

Civil Action No. 04-171-KAJ

**BRADLEY D. ANDERSON, Ph.D.
FED. R. CIV. P. 26(a)(2) EXPERT WITNESS REPORT CONCERNING
THE ISSUE OF INFRINGEMENT OF GLAXO'S '249 PATENT**



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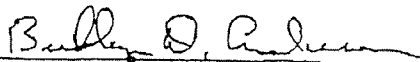
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NO. 498 0002

101. I may supplement or amend my opinions expressed in this Expert Witness Report if new or additional information is provided to me or becomes available from Teva or Teva's expert witnesses. I understand that expert reports may be provided by Teva. I reserve the right to respond to all matters raised by Teva and to testimony and opinions offered by Teva's witnesses.

Date: March 16, 2006


Bradley D. Anderson, Ph.D.

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EXHIBIT F

REDACTED VERSION – PUBLICLY FILED

**CONTAINS CONFIDENTIAL INFORMATION
UNDER PROTECTIVE ORDER**

**IN THE UNITED STATES DISTRICT COURT
DISTRICT OF DELAWARE**

GLAXO GROUP LIMITED,

Plaintiff,

v.

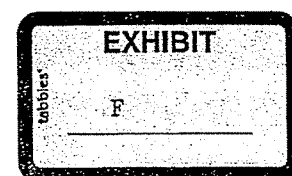
TEVA PHARMACEUTICALS
USA, INC. AND
TEVA PHARMACEUTICAL
INDUSTRIES LIMITED,

Defendants.

Civil Action No. 04-171-KAJ

BRADLEY D. ANDERSON, Ph.D.
FED. R. CIV. P. 26(a)(2) REBUTTAL EXPERT WITNESS REPORT

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75. I may supplement or amend my opinions expressed in this Expert Witness Report if new or additional information is provided to me or becomes available from Teva or Teva's expert witnesses. I reserve the right to respond to all matters raised by Teva and to testimony and opinions offered by Teva's witnesses.

Date: April 24th 2006


Bradley D. Anderson, Ph.D.